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BODY LICE INFESTATION

What are human body lice?

Body lice are small insects that live on the body and in the clothing or bedding of humans. They feed only on human blood. Currently in the United States, body lice infestations are found occasionally on homeless persons who do not have access to clean changes of clothes or facilities for bathing.

How do body lice differ from head and pubic lice?

Body (*Pediculus humanus humanus*) and head lice (*P. humanus capitis*) are morphologically indistinguishable, although head lice are smaller than body lice. *Body lice are most reliably differentiated from head lice by their presence on the clothing or on parts of the body other than the head.* These lice prefer to spend most of their time on the clothing of an infested person, visiting the body up to five times a day to feed. The eggs (called nits) of body lice are cemented to clothing fibers and seams or, occasionally, to body hairs. Head lice live in people's hair and glue their eggs directly to hair near the scalp. Pubic lice (*Phthirus pubis*) are easily distinguished from head and body lice by their round shape and crab-like appearance. Pubic lice are usually found in pubic hair, but may occasionally be found on other coarse body hair such as the axilla and facial hair.

What do body lice look like?

The body louse has three life stages: the egg (nit), the nymph, and the adult. The eggs are small (less than 1 mm long), oval, and yellow to white in color. They are generally easy to see in the seams of clothing, particularly around the waistline and under the armpits. The immature stage of the body louse is called a nymph. It looks like the adult louse and feeds on human blood, but is smaller. The adult body louse is grayish-white in color, has six legs, and is about the size of a sesame seed (2-4 mm long).

What are the signs and symptoms of body lice infestation?

The most common signs of body lice infestation are intense itching and a red rash located on the trunk. The bites from body lice are initially seen as small red dots that develop into wheal like areas of inflammation (light red elevation of the skin with a white center). Long-term body lice infestations may lead to thickening and discoloration of the skin, particularly around the waist, groin, and upper thighs. Secondary skin infections (impetiginization) can result from scratching.

Can body lice transmit disease?

Yes, epidemics of trench fever (*Bartonella quintana*), typhus (*Rickettsia prowazekii*), and louse-borne relapsing fever (*Borrelia recurrentis*) have been caused by the human body louse. Epidemic typhus and louse-borne relapsing fever do not occur in the United States. Infections with *Bartonella quintana*, including trench fever, are occasionally diagnosed in the United States. Homeless individuals with chronic alcoholism and body lice infestation have been found to be at higher risk for *Bartonella quintana* infection than the general population.

How are body lice spread?

Body lice can spread in crowded conditions where hygiene is poor and when clothing and/or bedding are shared. Infestations are more common in cooler climates and seasons when heavier clothes are worn. Lice rely on body heat to hatch eggs and to mature. The life cycle of the body louse is completed in an average of 18-21 days. Eggs will remain viable on clothing for up to 30 days when away from a host.

How are body lice infestations diagnosed?

Body lice infestation may be suspected in homeless individuals with itching and rash on the body, with or without secondary skin infections. Infestations are diagnosed by looking closely in the seams of clothing and on the body for eggs and for crawling lice. Body lice are usually found on clothing that is close to the skin and will be seen on other layers only when there is a heavy infestation. It is unusual for one individual to be infested with more than ten lice at a time.

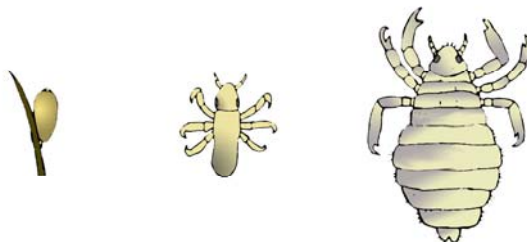
How are body lice infestations treated?

Body louse infestations should be treated by washing infested clothing and bedding in hot water (130° F). Items should then be placed in a clothes dryer on the hot cycle. The infested person should shower; individuals with extensive body hair may apply a one percent permethrin or pyrethrin shampoo (pediculicide) to the body.

How can body lice infestations be prevented?

Avoid sharing clothing (including headwear) or bedding. When practical, discard infested clothing. Remove and wash clothing frequently (at least once per week). Regular bathing can reduce pruritis and chance of secondary bacterial infections.

Three Stages of Body Lice*



Egg

Nymph

Adult

*Illustrations enlarged to show detail